Appl. No. 09/109,343
Amdt. dated December 9, 2003
Reply to Office Action of September 24, 2003

Amendments to the Specification:

To the Specification:

Please replace the two paragraphs that begin on page 8, line 1, with the following two paragraphs:

This approach of providing a logically separated routed topology for each VPN offers significant advantages over prior art approaches. Utilizing this approach, an ISP may, for example:

1.   choose which links and nodes are in a given VPN;
2.   assign a given link different administrative weights for different VPNs; and
3.   allocate different service levels/guarantees for different VPNs or provisions the service levels and guarantees differently. differently;
4.   use different routing protocols for the different VPNs VPNs; and
5.   completely isolate the traffic of one VPN from another.

Multi Protocol Label Switching (MPLS) is used on the data plane in certain embodiments of the present invention. MPLS is described in greater detail in *Callon et al. al.,* MPLS is intended to simplify the forwarding function of routing devices by introducing a connection-oriented mechanism inside the otherwise connectionless IP technology. A label switched path (LSP) is set up for each route. Edge routers analyze the traditional IP header (such as IP header 203) to decide which LSP to use and add a corresponding label switched path identifier in the form of a label (such as is shown in Figure 3A as VPN-ID 201, in Figure 3B as VPN-ID 201 and forwarding label 302 302, and in Figure 3C as VPN-ID/forwarding label 311 311).

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